

NAME OF THE COURSE		Technical drawing and design II					
Code	PMT152	Year of study	1				
Course teacher	Tomislav Matić	Credits (ECTS)	3				
Associate teachers	Dražen Kustura	Type of instruction (number of hours)	L	S	E	F	
			15	15			
Status of the course	Compulsory	Percentage of application of e-learning					
COURSE DESCRIPTION							
Course objectives	Adopting knowledge needed to apply ISO code system for linear size tolerances, fits, geometrical tolerances and surface texture, for the purposes of objects unequivocal and complete definition. Acquiring knowledge and skills needed to create two-dimensional technical drawings using a computer.						
Course enrolment requirements and entry competences required for the course	None.						
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	1. Explain ISO code system for linear size tolerances and fit designation, 2. Describe the designation system of surface roughness, 3. Explain ISO code system for geometric tolerances, 4. Produce a technical drawing using a computer						
Course content broken down in detail by weekly class schedule (syllabus)	<p>Week 1: General about tolerances. Basic terms of ISO tolerance system for linear measure. Week 2: The size of the tolerance zone. The position of the tolerance zone. Week 3: Type of fit. System of fit. Tolerances of dimensions where high precision of production is not required. Designation of tolerances on technical drawing. Week 4: Examples of fit calculations. Week 5: The influence of temperature on the fits. Week 6: Examples of fit calculations with the influence of temperature. Week 7: Colloquium. Week 8: Basics of AutoCAD: user interface, adjusting and measuring units, commands, coordinate systems, absolute and relative coordinates, screen commands, views. Week 9: Basic commands for drawing (line, multiline, circle, arc, rectangle, polygon, spline). Basic commands for modifying objects (copy, move, offset, rotate, stretch, trim, extend, mirror, array, fillet, chamfer). Week 10: Precise drawing (ortho, track, object snap). Working with text. Layers: purpose, layers definition, line types. Hatching. Week 11: Dimensioning: setting dimensioning style, dimensioning of length, circles, arcs, chain and parallel dimensioning. Using special marks on dimensioning lines. Preparation of drawings to print: a measure, formats, orientation, thickness and type of lines. Week 12: The surface texture. Basic terms. Week 13: Designation of surface texture on technical drawings. Week 14: Geometric tolerances. Basic symbols and characteristics of geometric tolerances. Examples of geometric tolerance application. Week 15: Colloquium.</p>						
Format of instruction	<input checked="" type="checkbox"/> lectures <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> exercises <input type="checkbox"/> <i>on line</i> in entirety <input type="checkbox"/> partial e-learning <input type="checkbox"/> field work		<input checked="" type="checkbox"/> independent assignments <input type="checkbox"/> multimedia <input type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)				
Student responsibilities	Class attendance, seminar, independent study and literature reading, accessing colloquia and/or written and oral examination.						
Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is	Class attendance	0,75	Research		Practical training		
	Experimental work		Report		Attending the seminars	0,75	
	Essay		Seminar essay	0,5	Independent learning	1	
	Tests		Oral exam		(Other)		

<i>equal to the ECTS value of the course)</i>	Written exam		Project		(Other)	
Grading and evaluating student work in class and at the final exam	<p>Seminar papers have to be successfully completed. Two colloquiums or written and oral exams in the examination period.</p> <p>Students which achieve more than 50% result of each colloquium or at written/oral exam will have successfully completed the course. Depending of the achieved result percentage at colloquium or at written/oral exam final grades are as follows: 50 - 62% - sufficient (2) 63-75% - good (3) 76-87% - very good (4) 88-100% - excellent (5)</p>					
Required literature (available in the library and via other media)	Title			Number of copies in the library	Availability via other media	
	1. Matić T., Grafičko komuniciranje i dizajn 2, recenzirano predavanje, web fakulteta 2015.					
Optional literature (at the time of submission of study programme proposal)	1. Piršić T., Tehničko crtanje, Udžbenici Sveučilišta u Splitu, Split, 2010. 2. Opalić M., Kljajin M., Sebastijanović S., Tehničko crtanje, Zrinski, Čakovec, 2003.					
Quality assurance methods that ensure the acquisition of exit competences	Conducting an anonymous student surveys, talk with students, analyses the success of students on tests and exams, self-assessment.					
Other (as the proposer wishes to add)						